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10/564,903

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EXAMINER

HUYNH, NAM TRUNG

ART UNIT

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2617

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,903	<b>Applicant(s)</b> FARRILL ET AL.	
	<b>Examiner</b> NAM HUYNH	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 43-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 43-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/23/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to amendment filed 6/23/09. Of the previously presented claims 1-16, claims 1 and 5-7 have been amended and claims 43-58 have been added.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 6/23/09 has been considered by the Examiner.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-7, 9, 12, 43-49, 51, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292).

Regarding claims 1 and 43, Mangal teaches an apparatus (comm server) for providing group voice services in a wireless cellular network (column 7, lines 17-22), comprising:

a cellular network (figure 1, items 18, 20; radio access network) for making calls (PTT sessions) between handsets, wherein the calls are initiated by call setup and in-band signaling (session initiation request and traffic channel setup) within the cellular network and voice frames for the calls are switched by at least one mobile switching center (column 8, lines 39-51; BSC or MSC) between the handsets across bearer paths (RTP legs) in the cellular network (column 11, lines 64-67; column 12, lines 1-31); and

a real-time exchange (comm server) that interfaces to at least one mobile switching center in the wireless cellular network to provide group voice services therein (figure 1; radio access network is connected to the comm server via a PDSN and IP network), wherein the group voice services provide a half-duplex Push-to-Talk (P2T) session between an initiator and one or more other participants, wherein the P2T session comprises a half-duplex dispatch call both the real-time exchange and the handsets participating in the P2T session communicate with each other using the call setup and in-band signaling within the wireless cellular network (column 11, lines 64-67; column 12, lines 1-58).

However, Mangal does not explicitly teach that the network is capable of offering a Push-to-Conference (P2C) session, wherein the P2C session comprises a full-duplex conference call and a half-duplex P2T session is capable of being upgraded to the full-duplex P2C session by invoking "Upgrade to Conference" on one of the handsets participating in the P2T session. Edwards discloses a method and apparatus for providing a full duplex dispatch (title). Edwards teaches that a PTT server (system controller) may provide the necessary channel resources to support a full duplex call (P2C session) (paragraph 12) and that a user who establishes a half-duplex call may upgrade to a full duplex call by pressing one or more keys or a menu button ("Upgrade to Conference" initiation) on the mobile device (paragraph 11). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal, to allow the comm server to support full duplex PTT sessions and add the capability for users to upgrade to a full duplex mode, as taught by Edwards, in order to allow utilize the quick call set-up provided by half duplex PTT calls while allowing users to take advantage of full duplex operation if desired.

Regarding claims 2 and 44, Edwards teaches the participants comprise one or more contacts, one or more groups of contacts, or a subset of a group of contacts (paragraph 21).

Regarding claims 3 and 45, Edwards teaches the initiator initiates the full-duplex P2C session by invoking "Push-to-Conference" on their handset (paragraph 21).

Regarding claims 4 and 46, Edwards teaches the initiator upgrades an established half-duplex Push-to-Talk (P2T) session to the full-duplex P2C session by

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invoking "Upgrade to Conference" on their handset (paragraphs 11, 16; activating a key or menu item for full duplex dispatch).

Regarding claims 5 and 47, Mangal teaches the initiator's handset signals the real-time exchange via the cellular network, and the real-time exchange initiates and manages the full-duplex P2C session (column 11, lines 64-67; column 12, lines 1-58).

Regarding claims 6 and 48, Mangal teaches the real-time exchange causes the cellular network to perform call setup with the other participants for the full-duplex P2C session, and the real-time exchange initiates and manages the full-duplex P2C session (column 11, lines 64-67; column 12, lines 1-58).

Regarding claims 7 and 49, Mangal teaches the real-time exchange causes the cellular network to signal the other participants to join the full-duplex P2C session (column 11, lines 19-27).

Regarding claims 9 and 51, Edwards teaches the real-time exchange mixes audio streams from the initiator and other participants, and delivers these mixed audio streams to the initiator and other participants (paragraphs 12, 18).

Regarding claims 12 and 54, Edwards teaches initiator can downgrade the full-duplex P2C session to a half-duplex P2T session (paragraph 11).

4. Claims 8, 16, 50, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292)

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as applied to claims 1 and 43, and further in view of Boyle et al. (US 6,606,305) (hereinafter Boyle).

Regarding claims 8 and 50, the combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach that the other participants invoke "Join Conference" on their handsets to join the full-duplex P2C session. Boyle discloses an apparatus, method, and system for automatic telecommunication conferencing and broadcasting. Boyle teaches that an end user decides to join or not join a session by entering a code on their handset (column 6, lines 30-48). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile stations of Mangal and Edwards to allow a recipient of the full-duplex call to indicate whether or not he/she wants to join, as taught by Edwards, in order to increase the flexibility of the system by giving the recipient the capability to accept/reject the full-duplex dispatch call.

Regarding claims 16 and 58, Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach that the full-duplex P2C session continues when the initiator disconnects the call, if at least two of the other participants do not disconnect. Boyle teaches that the conference communication session is maintained until the last two end users terminate the call (column 7, lines 8-19). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal and Edwards to allow the full-duplex call to be maintained when particular participants disconnect, as taught by Boyle, in order to allow

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participants who want remain on the conference line to communicate and allow others to join at a later time if desired or needed.

5. Claims 10 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292) as applied to claims 1 and 43, and further in view of Sarkar et al. (US 7,236,580) (hereinafter Sarkar).

The combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach the initiator and other participants can choose to remain silent by invoking a "mute" option on their handsets, which causes the handset's microphone to be muted. Sarkar discloses a method and system for conducting a conference call. Sarkar teaches that a passive participant may mute his/her audio output and listen to a conference call. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal and Edwards to allow a participant of the full duplex call to mute his/her audio output, as taught by Sarkar, in order to allow a call conference participant to selectively participate in the conference call while attending to another matter.

6. Claims 11 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292) as applied to claims 1 and 43, and further in view of Ahmed et al. (US 7,085,364) (hereinafter Ahmed).



The combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach the initiator can add or drop participants during the full-duplex P2C session. Ahmed teaches that an initiator of a conference call can drop or add participants during the call (column 7, lines 43-65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal and Edwards to include the ability to add drop users during the call, as taught by Ahmed, in order to allow the initiator of the full duplex call to more efficiently manage the participants of the call thus increasing the flexibility of the system.

7. Claims 13, 15, 55, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292), as applied to claims 1 and 43, and in further view of Wilson (US 6,192,119).

Regarding claims 13 and 55, the combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach all charges related to the full-duplex P2C session are charged to the initiator. Wilson teaches billing the initiator of the conference call for the call as a known concept (column 1, lines 30-47). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Mangal and Edwards, to include the capability to charge the initiator of the conference call for all charges, as taught by Wilson, in order to allow the conference initiator to bear the cost of all calls which is better suited for business conferencing or social chat lines.

Regarding claims 15 and 57, the combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach the initiator and other participants in the full-duplex P2C session are all charged for usage. Wilson discloses telephone conferencing systems (title). Wilson teaches the billing of all participants of a conference call (column 1, lines 30-47). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal and Edwards to include the capability to charge all participants of the full duplex call, as taught by Wilson, in order to allow all individual participants to bear the costs of their own calls which is better suited for residential or domestic use.

8. Claims 14 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal et al. (US 6,865,398) in view of Edwards (US 2004/0228292), as applied to claims 1 and 43, and further in view of Botterell et al. (US 3,912,874) (hereinafter Botterell).

The combination of Mangal and Edwards teaches the limitations set forth in claims 1 and 43, but does not explicitly teach the full-duplex P2C session is terminated when the initiator disconnects the call, even if the other participants do not disconnect. Botterell discloses a conference arrangement. Botterell teaches that when a conference originator decides to end a conference, all the conferee ports are released (column 5, lines 40-45). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mangal and Edwards to allow the full duplex call to terminate when the call initiator disconnects, as

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taught by Botterell, in order to give full control of the call to the initiator and not allow any communication between the participants to occur without the initiator being connected to the call.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-16 and 43-58 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/  
Examiner, Art Unit 2617